

N50092.AR.000113
JEB FORT STORY, VA
5090.3a

LETTER OFFERING COMMENTS ON DRAFT SITE INVESTIGATION REPORTS FORT
STORY VA
10/8/1991
COMMONWEALTH OF VIRGINIA DEPARTMENT OF WASTE MANAGEMENT



COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT

11th Floor, Monroe Building

101 N. 14th Street

Richmond, VA 23219

(804) 225-2667

TDD (804) 371-8737

October 8, 1991

Commander
U.S. Army Transportation Center
ATTN: ATZF-EHE (Ms. Joan Vandervort)
Building 1407
Fort Eustis, Virginia 23604-5332

Subject: Fort Eustis and Fort Story Site Investigation Reports

Dear Ms. Vandervort:

We have reviewed the August 1991 draft PA/SIs for the two installations and NIKE sites. Our comments are enumerated below.

General Comments

1. In general the site descriptions did not include any information on potentially affected ecological systems or receptor populations. For PA/SIs we prefer brief descriptions of these aspects of a site. For example, this might include whether people work in the vicinity of a site and distances to residential areas or wetland or other aquatic environments. A brief description of an aquatic environment is also useful; for example, the approximate size and general nature of a potentially affected wetland.

Identification of Trigger Levels

2. A soil trigger level of 25 ppm for PCBs has been developed based on the TSCA PCB spill cleanup policy. This assumed that the areas under consideration could be classified as "restricted access" locations. However, we do not consider most areas on Fort Eustis or Fort Story to be "restricted access". The TSCA spill policy defines restricted access areas as those at least 0.1 kilometer from a residential/commercial area and limited by man-made or natural barriers. Under the TSCA policy, unrestricted areas must be cleaned to at least 10 ppm, however it also requires a 10"

clean cap over the area. Considering these and other factors, it is our position that a trigger level for PCBs in soil should be 1 ppm. This is also the concentration specified in the TSCA policy for defining "clean fill".

3. The trigger levels for sediments are assumed to be the same as for soils. Although this may be acceptable for the stagnant pond at the Butler Farms NIKE facility on Ft. Eustis (site 19A), in general this would not be appropriate.

Fort Eustis

Central Heating Fuel Spill Area (site 9)

4. We are especially concerned about the high concentration of 190 mg/kg PCB reported in sediment sample SD-224 in a wetland area (the only sediment result reported). This concentration of PCBs in wetland sediments is alarming. Furthermore, the PCB mixture detected was Arochlor 1260, the most highly chlorinated and toxic of the Arochlors. There was no discussion of the significance of the PCB contamination in the report. The discussion mentioned previous sampling efforts in the Bailey's Creek area, but it was unclear where other samples were taken in relation to SD-224, although there were apparently no other samples in this general area. Based on our current knowledge of the site, there is a potential for severe ecological effects and additional investigation should be undertaken immediately.

5. The recommendations of the contractor include an RI/FS to determine the extent of PCB and petroleum contamination. Since moderately high concentrations of polynuclear aromatic hydrocarbons (PAHs) were also found in some soil samples, these compounds should also be included in the studies.

Past Pesticide Storage Area (Site 20)

6. Surface soils do not appear to have been adequately characterized. Additional sampling around building 1404 is warranted due to past evidence of poor handling within the building and the activities associated with a pesticide shop. Additional sampling is warranted around the horseshoe area due to the levels of chlordane and toxaphene detected in the samples in that area. The surface soil sampling is necessary to determine if concentrations are of concern for direct human contact.

7. There is no mention in the report concerning investigation of the stormwater drainage from the site except a note that

there is a storm drain (p. 2-56). No details about the routing of storm sewers is supplied. There is also no mention of building 1404 drains and where they are connected or if this route of migration has been investigated in other studies.

Butler Farms NIKE Missile Site (19A)

8. The report references a previous study (Law Engineering and Testing Company, 1986) that apparently describes potential areas of contamination at NIKE missile sites. These should be mentioned in the report and some explanation provided to explain why sampling at this site did not show contamination.

9. A better description of surface water runoff should be provided for the site. There is only a reference to a storm drain that could not be sampled due to a lack of water (p. 2-61).

10. The groundwater flow directional indicator is reversed in the figure contained in the Analytical Results Document.

Fort Story

Landfill #2 (site 2)

11. There was no sampling of surface water or sediments in this investigation. Due to the location of this site, groundwater may not give a complete picture of the potential migration of contaminants from the landfill. For example, direct surface water runoff could be a pathway if there is no clean cover or leachate could be discharging to the wetlands. There is also the additional effect of tides which could be mobilizing contaminants. Samples of surface water and sediment should be collected in the confirmatory sampling.

Fire Training Area (site 4)

12. The contractor recommends an RI/FS for this site to delineate soil and groundwater contamination near the pit and in the southeastern part of the site. However, based on the information in the present study, contamination north of the pit cannot be ruled out. Soil gas readings were obtained in this area but no soil contamination was found. This may indicate the source of the soil gas was contaminated groundwater. Further, it is suggested in the document that a groundwater divide may exist in this area (p. 2-38). An additional complication is the existence of different contaminants in the two areas where contamination was discovered and the possibility of different sources. The

Ms. Joan Vandervort
page 4

RI/FS should address these issues.

LARC Maintenance Area (site 6)

13. The function of the holding pond shown in figure 2-20 should be mentioned. If necessary, the structure and other details should also be given.

Autocraft Building (site 7)

14. The report should indicate when the USTs were removed at this site and if done under Water Control Board regulations.

NIKE Facility

15. The comments for the Butler Farms NIKE facility (discussion of potential problem areas and a description of surface water runoff) also apply here.

Please call me at (804) 225-3260 if you have any questions regarding the comments in this letter or would like to discuss the reports further. It is our understanding that you will be addressing the comments in this letter in writing.

Sincerely,



Glenn Metzler
Environmental Toxicologist
Federal Facilities Program

cc: Erica Dameron, DWM

TABLE 3-38
SURFACE WATER SAMPLES - FT STORY, SITE 3

Parameters	SW-201	SW-202	SW-203
Pesticides/PCBs (µg/l)			
p,p' DDT	0.08	ND ^a	ND
VOCs (µg/l)			
Toluene	ND	ND	11.
BNAs (µg/l)			
Phenol	ND	ND	5.2
4-Methylphenol	ND	ND	35.
Metals (mg/l)			
Copper	0.042 (0.012)	0.017	0.024
Mercury	ND	ND	0.0002
Lead	0.085 (0.005) (0.0032)	ND	0.030
Zinc	0.38 (0.047)	0.064	0.053
Cyanide (mg/l)	ND	ND	ND
Inorganics (mg/l)			
Flouride	0.11	0.15	ND
Chloride	22.3	22.9	29.3
Field Parameters ^b			
Temperature (°C)	28.4	22.9	29.3
pH	6.7	6.1	6.9
Conductivity (µmho)	140	155	140
Turbidity (NTU)	28.4	124.4	120.6

^a ND - not detected

^b Field parameters measured after purging; prior to sampling